## WHAT IS CLAIMED IS:

1. Apparatus, comprising:

computer readable media; and

program code, stored on the computer readable media, comprising:

code to define a user interface;

code to detect invalid test definition data in user input and, upon detection of invalid test definition data, prompt a user to select a valid data option from a set of valid data options; said prompting being undertaken through the user interface; and

code to receive a valid data option selected through the user interface, and to update the invalid test definition data with the valid data option.

- 2. The apparatus of claim 1, wherein the program code further comprises code to compile the set of valid data options based on a context of the invalid test definition data.
- 3. The apparatus of claim 2, wherein the program code to compile the set of valid data options uses the context of the invalid test definition data to index a table of valid data options.
- 4. The apparatus of claim 3, wherein the program code further comprises code to parse the user input and log valid data options into said table.
- 5. The apparatus of claim 2, wherein said context comprises a data type.

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- 6. The apparatus of claim 1, wherein at least some of said user input is received through said user interface.
- 7. The apparatus of claim 1, wherein at least some of said user input is contained in a test definition file.
- 8. The apparatus of claim 1, wherein the code that prompts a user to select a valid data option causes the set of valid data options to be displayed through the user interface in alphabetical order.
- 9. The apparatus of claim 1, wherein the code that prompts a user to select a valid data option causes the set of valid data options to be displayed through the user interface in order of highest likelihood of correctness.
- 10. The apparatus of claim 1, wherein the user interface comprises code to configure how the set of valid data options is displayed through the user interface.
- 11. The apparatus of claim 1, wherein the user interface comprises code to define an input area to receive a specification for invalid test definition data that has been detected as invalid because it lacks a specification to make it valid.

- 12. The apparatus of claim 11, wherein said input area to receive a specification for invalid test definition data is configured to receive a data type.
- 13. The apparatus of claim 1, wherein the set of valid data options comprises a single valid data option that is replaceable by the user.
- 14. A computer-based method, comprising:

parsing user input to detect invalid test definition data in the user input;
upon detecting invalid test definition data, prompting a user to select a valid data
option from a set of valid data options;

upon receiving a valid data option selected from the set of valid data options, updating the invalid test definition data with the valid data option; and generating circuit test data structures to control an automated circuit tester.

- 15. The method of claim 14, wherein parsing user input comprises parsing a test definition file.
- 16. The method of claim 14, further comprising compiling the set of valid data options based on a context of the invalid data.
- 17. The method of claim 14, wherein the set of valid data options is displayed to the user in alphabetical order.

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18. The method of claim 14, wherein the set of valid data options is displayed to the user in order of highest likelihood of correctness.

## 19. A computer-based method, comprising:

parsing source code for generating circuit test data structures, to identify type name definitions and enumeration constant definitions contained in said source code; generating a string table from said type name and enumeration constant definitions; and

linking said string table to an input validation and error messaging portion of said source code to i) cause said source code to index said string table upon detection of invalid test definition data in user input, and then ii) cause a set of valid data options retrieved from said string table to be displayed to a user for user selection.

20. The method of claim 19, wherein said index into said string table comprises a context of said invalid test definition data.